



Energy Fuels Resources (USA) Inc. *m0370046*  
225 Union Blvd. Suite 600  
Lakewood, CO, US, 80228  
303-974-2140  
www.energyfuels.com *Task ID# 7091*  
*cc: mik*

January 14, 2016

Mr. Paul Baker  
State of Utah Department of Natural Resources  
Division of Oil, Gas and Mining  
1594 West North Temple Suite 1210  
Box 145801  
Salt Lake City, UT 84114-5801

RECEIVED

JAN 19 2016

DIV. OF OIL, GAS & MINING

**RE: Submittal of Large Mine NOI Revision for Redd Block IV Mine (M/037/0046)**

Dear Paul:

In response to your request to re-evaluate the Redd Block IV Mine (M/037/0046) reclamation cost estimate, Energy Fuels Resources (USA) Inc. (Energy Fuels) is submitting the enclosed Application for Mineral Mine Plan Revision or Amendment along with two printed copies of the revised Attachment D Surety Estimate.

Please contact me at 303-389-4133 or [areither@energyfuels.com](mailto:areither@energyfuels.com) if you have any questions or need additional information.

Sincerely,

A handwritten signature in blue ink that reads 'Andrea Reither'.

Andrea Reither  
Senior Environmental Specialist

Digital Cc: M. Bradley, W. Western (UDOGM), S. Bakken, T. White (Energy Fuels)



RECEIVED  
JAN 19 2016  
DIV. OF OIL, GAS & MINING

## Application for Mineral Mine Plan Revision or Amendment

**Operator:** Energy Fuels Resources (USA) Inc.

**Mine Name:** Redd Block IV

**File Number:** M/ 037 / 0046

Provide a detailed listing of all changes to the mining and reclamation plan that will be required as a result of this change. Individually list all maps and drawings that are to be added, replaced, or removed from the plan. Include changes of the table of contents, section of the plan, pages, or other information as needed to specifically locate, identify and revise or amend the existing Mining and Reclamation Plan. **Include page, section and drawing numbers as part of the description.**

### DETAILED SCHEDULE OF CHANGES TO THE MINING AND RECLAMATION PLAN

			DESCRIPTION OF MAP, TEXT, OR MATERIALS TO BE CHANGED
<input type="checkbox"/> ADD	<input checked="" type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Attachment D Surety Estimate
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**I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments and obligations, herein.**

Harold R. Roberts

Print Name

Sign Name, Position

Exec. VP Conventional  
Operations

January 14, 2016

Date

### Return to:

State of Utah  
Department of Natural Resources  
Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Box 145801  
Salt Lake City, Utah 84114-5801  
Phone: (801) 538-5291 Fax: (801) 359-3940

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### FOR DOGM USE ONLY:

File #: M/ /

Approved: \_\_\_\_\_

Bond Adjustment: from (\$) \_\_\_\_\_  
to \$ \_\_\_\_\_



# **Reclamation Cost Estimate**

## **Redd Block Mine**



**Prepared by**  
**Energy Fuels Resources (USA) Inc.**  
**225 Union Boulevard, Suite 600**  
**Lakewood, CO 80228**



**January 2016**

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Reclamation Cost Estimate.docx



## 1.0 Introduction

The Redd Block Reclamation cost estimate utilizes reference materials including Mine Maps, 2014 RS Means, and the UDOGM reclamation cost for 9 acres of disturbance. A number of the smaller tasks were estimated on a lump sum basis based on quotes from local contractors or the company's experience on similar sites.

This reclamation cost estimate is designed to quantify the reclamation liability for the Redd Block Mine

## 2.0 Reclamation Tasks

The reclamation tasks at the Redd Block Mine include demolition of a concrete pad, abandoning 9 monitoring wells, and reclaiming 9 acres of disturbance. Mobilization and demobilization has been determined to have no cost since the Redd Block Mine is with 50 Miles of Moab, which is the closest Wheeler Cat location.

### 2.1 Project Indirect Costs

The project's indirect costs factors are provided by the Division of Oil, Gas and Mining. These factors were used to calculate the Contingency, Engineering Redesign, Main Office Expense, and project Management Fee. Details of the project indirect costs are shown on the Summary worksheet.

## 3.0 Summary

Energy Fuels estimates the reclamation cost (in \$2020) for the combined Redd Block Mine is:

• Demolition of the Concrete Pad –	\$2,218
• Well Abandonment -	\$10,848
• Disturbed Land Reclamation -	\$55,800
• Project Indirect Costs –	\$13,600
• Total –	\$83,000

A detailed description and reclamation cost estimate is provided in the following attachments.



**Redd Block Mine  
Reclamation Cost Workbook**



## Redd Block IV Bonding Calculations 2015

### Direct Costs

Task 1: Abandon Existing Wells	\$10,848
Task 2: Demolition of Concrete Pad	\$2,218
Task 3: Disturbed Land Reclamation	\$55,800
<b>Subtotal Direct Costs</b>	<b>\$68,866</b>

### Indirect Costs

Mob/Demob	\$0	0.0%
Contingency	\$3,443	5.0%
Engineering Redesign	\$1,722	2.5%
Main Office Expense	\$4,683	6.8%
Project Management Fee	\$1,722	2.5%
<b>Subtotal</b>	<b>\$11,569</b>	<b>16.8%</b>

<b>Total Cost 2015</b>	<b>\$80,435</b>
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Escalation (0.5% every year for 5 years)	\$2,031
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Reclamation Cost Escalated to 2020	\$82,466
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Bond Amount (rounded to nearest \$1,000)	\$83,000
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# REDD BLOCK IV MINE

Description: Support calculations for the reclamation cost estimate for the Redd Block IV Mine

## Task 1: Abandon Existing Wells

### Assumptions

The existing wells have already been completed. Reclamation will consist of removing protective surface shroud, fill the well with a bentonite material and placing a surface concrete plug, to 3 feet below surface.

A cost estimate for labor and materials was provided by Bayles Exploration Inc. out of Blanding Utah.

The 9 wells consist of 3@ 2" PVC to a depth of 100', 3@ 4" PVC to a depth of 300', and 3@ 4" steel to a depth of 1000'.

Item	Quantity	Cost
Materials	N/A	\$ 7,028
Equipment and Labor	N/A	\$ 3,820
Total		\$ 10,848

## Task 2: Demolition of Concrete Pad

### Assumptions

Concrete pads will be broken into manageable pieces and placed within the Development Rock Area prior to final grading.

RS Means reference 02 41 13 17 5300 was used to estimate the costs. \$19.80 per square yard.

Item	Quantity (sf)	Quantity (sy)	RS Means Reference	Unit Cost
Existing Pad (24' x 42')	1,008	112	02 41 13 17 5300	\$ 19.80
Total				\$ 2,217.60

## Task 3: Disturbed Land Reclamation

### Assumptions

The costs to reclaim the disturbed area of the Redd Block IV Mine are estimated by using UDOGM's SMO with No Openings workbook.

The 5 year escalated value was used for the cost per acre reclaimed.

Item	Quantity	Reference	Unit Cost
First 6 acres Existing Disturbed Area	1	UDOGM	\$ 38,100.00
Additional acres (3 acres)	3	UDOGM	\$ 5,900.00
Total			\$ 55,800.00



### **Quote From Bayles Exploration**



# BAYLES EXPLORATION INC

159 West 700 North  
Blanding, Utah 84511  
Phone: 435-678-2434  
Fax: 435-678-4032

## FAX

To: Ryan Ellis Date: 11-19-15

Fax email:

#: rellis@energyfuels.com Pages: 1

Phone: 303-974-2151 Lakewood, CO

RE: \_\_\_\_\_ CC: \_\_\_\_\_

COMMENTS: Scope of Work:

Abandon wells @ The Redblock Mine:

3 wells w/ 2" PVC to 100' each

3 wells w/ 4" PVC to 300' each

3 wells w/ 4" Steel to 1000' each

materials - \$ 7028.00

Equipment + labor - \$ 3820.00

Total project = \$ 10,848.00

